Title (en)

In-Situ STEM Sample Preparation

Title (de)

In-Situ-STEM-Probenherstellung

Title (fr)

Préparation d'échantillon STEM in situ

Publication

EP 1998356 A3 20090311 (EN)

Application

EP 08157258 A 20080530

Priority

US 80971507 A 20070601

Abstract (en)

[origin: EP1998356A2] A method for STEM sample preparation and analysis that can be used in a FIB-STEM system without a flip stage. The method allows a dual beam FIB/STEM system with a typical tilt stage having a maximum tilt of approximately 60 degrees to be used to extract a STEM sample to from a substrate, mount the sample onto a TEM sample holder, thin the sample using FIB milling, and rotate the sample so that the sample face is perpendicular to a vertical electron column for STEM imaging.

IPC 8 full level

H01J 37/305 (2006.01)

CPC (source: EP US)

H01J 37/3056 (2013.01 - EP US); H01J 2237/31745 (2013.01 - EP US)

Citation (search report)

- [DA] US 6963068 B2 20051108 - ASSELBERGS PETER EMILE STEPHAN [NL], et al
- [A] EP 1473560 A1 20041103 - INTEGRATED CIRCUIT TESTING [DE]
- [PA] EP 1870691 A2 20071226 - FEI CO [US]
- [PDA] WO 2008049133 A2 20080424 - FEI CO [US], et al
- [A] US 2004245466 A1 20041209 - ROBINSON JOSEPH [US], et al

Cited by

DE102011002583B9; US9455120B2; EP2400524A3; CN104091745A; EP2001038A3; DE102011002583A1; DE102011002583B4; CZ309873B6; CN109461640A; DE102017212020B3; US10347461B2; US8247785B2

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MT NL NO PL PT RO SE SI SK TR

Designated extension state (EPC)

AL BA MK RS

DOCDB simple family (publication)

EP 1998356 A2 20081203; **EP 1998356 A3 20090311**; **EP 1998356 B1 20100707**; AT E473512 T1 20100715; DE 602008001685 D1 20100819; JP 2009014709 A 20090122; JP 5090255 B2 20121205; US 2008296498 A1 20081204; US 8835845 B2 20140916

DOCDB simple family (application)

EP 08157258 A 20080530; AT 08157258 T 20080530; DE 602008001685 T 20080530; JP 2008140448 A 20080529; US 80971507 A 20070601